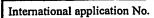
PATENT COOPERATION TREATY



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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

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	INTERNATIONA	L PRELIMINAR	Y EXAMIN	ATION REPORT		
		(PCT Article 36 a				
Applicant's or agent's file reference P801588/WO/1 International application No.		FOR FURTHER ACTION See Notification of Transmittal of Internation Preliminary Examination Report (Form PCT/IPEA/41				
		rnational filing date (da		Priority date (day/month/year)		
PCT/EP2003/009919 International Patent Classification (IPC) or r		September 2003 (13 September 2002 (13.09.200		
B25J1/00	incation (IPC) or nations	ar classification and if c				
Applicant		DAIMLERCHRYS	LER AG			
This international and is transmitted	l preliminary examination	on report has been prepa ing to Article 36.	red by this Inter	rnational Preliminary Examining Authorit		
	onsists of a total of		iding this cover	sheet.		
This repor	rt is also accompanied b	v ANNEXES, i.e., sheet	s of the descript	tion, claims and/or drawings which have l		
amended a	and are the basis for this Section 607 of the Adn	report and/or sheets cor	itaining rectific	cations made before this Authority (see		
These ann	exes consist of a total o	fsheet	5.			
3. This report conta	ins indications relating	to the following items:				
	Basis of the report					
II Priority						
III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability						
IV Lack of unity of invention						
v ⊠ .	V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement					
VI Certain documents cited						
VII Certain defects in the international application						
vin 🗌 '	Certain observations on	the international application	ation			
			•			
Date of submission of the	ne demand	Da	te of completion	n of this report		
08 Ap	oril 2004 (08.04.200	94)	29	9 March 2005 (29.03.2005)		
Name and mailing address of the IPEA/EP			Authorized officer			
_						
Facsimile No.			lephone No.			



INTERNATIONAL PRECIMINARI EXAMINATION REPORT	PC1/EP2003/009919							
I. Basis of the report								
1. With regard to the elements of the international application:*								
the international application as originally filed	the international application as originally filed							
the description:								
pages 1-24	, as originally filed							
pages	, filed with the demand							
pages, filed with the lette								
the claims:								
pages 1-12	, as originally filed							
pages, as amended (to								
pages	, filed with the demand							
pages, filed with the letter	er of							
the drawings:								
pages 1-6	, as originally filed							
pages								
pages, filed with the letter								
the sequence listing part of the description:								
	on oxidin =11 61 3							
pages								
pages, filed with the letter								
the international application was filed, unless otherwise indicated under this item. These elements were available or furnished to this Authority in the following language								
been furnished. 4. The amendments have resulted in the cancellation of: the description, pages the claims, Nos. the drawings, sheets/fig This report has been established as if (some of) the amendments had not been not beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(compared to this report as "originally filed" and are not annexed to this report since they and 70.17). **Any replacement sheet containing such amendments must be referred to under item 1 and 1.17.	e)).** un invitation under Article 14 are referred to value of the contain amendments (Rule 70.16)							

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/EP 03/09919

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V.	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement							
1.	Statement			· · · · · · · · · · · · · · · · · · ·				
	Novelty (N)	Claims	1-12	YES				
		Claims		NO				
	Inventive step (IS)	Claims	1-7	YES				
		Claims	8-12	NO				
	Industrial applicability (IA)	Claims	1-12	YES				
		Claims		 NO				

Citations and explanations

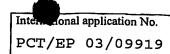
1. Reference is made to the following documents:

D1: DE 299 18 486 UD2: US 5 345 675 A.

- 2. The present application fails to meet the requirements of PCT Article 33(1) because the subject matter of claim 8 does not involve an inventive step (PCT Article 33(3)).
- 2.1 In the applicant's letter of 18 January 2005, it is argued that the sensors (38, 40) according to document D2 must be metrically calibrated and that, in consequence, the subject matter of claim 8 is novel.

This point need not be resolved since, although novelty would be thus established, a person skilled in the art seeking to solve the problem of interest, namely that of achieving a cheaper configuration of the device according to document D2, would dispense with the metric calibration of the sensors, without being thereby inventive, and arrive in this way at the subject matter of claim 8.

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- 2.2 Proceeding from document D1, likewise, the subject matter of claim 8 fails to involve an inventive step since, in D1 too, a costly calibration can be omitted without thereby being inventive.
- 2.3 The applicant is advised that, although a device according to the prior art may not operate with the desired precision without calibrated sensors, this is not relevant to the assessment of inventive step.
- Furthermore, the application fails to meet the requirements of PCT Article 6 since claim 8 lacks clarity.

The patentability of a claimed device generally depends on a technical effect, which in the present instance goes beyond the mere omission of calibration since, without the device features that correspond to the method features of the characterising part of claim 1, the device cannot solve the problem of interest.

Therefore, in addition to the feature that at least one of the sensors (14, 14', 14", 114) is not metrically calibrated, claim 8 should explicitly include those means for implementing an iterative control process that are implicitly derivable from the method steps of the characterising part of claim 8.

A version of claim 8 amended in this way would be considered to involve an inventive step.

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- 4. Claims 9-12 likewise have, mutatis mutandis, the defects set forth in points 2. and 3. above.
- 5. Novelty and inventive step are acknowledged in respect of claim 1 and dependent claims 2-5. The reasons are as follows:

Document D1 (DE 299 18 486 U) is the closest prior art.

Said document addresses the problem that accurate positioning of the machine tool relative to the workpiece requires a high-precision positioning system with calibrated sensors.

The invention solves this problem by means of an iterative control process in which an actual measurement from the sensor is generated and compared with a reference measurement generated during a set-up phase and then a Jakobi matrix is used to calculate a displacement vector from the difference of said measurements and finally the tool and sensor, in combination, are displaced by said displacement vector.

6. The uses, as defined in independent claims 6 and 7, of a method according to one of claims 1 to 5 are novel and involve an inventive step.